North Carolina legislature

April 21, 2010



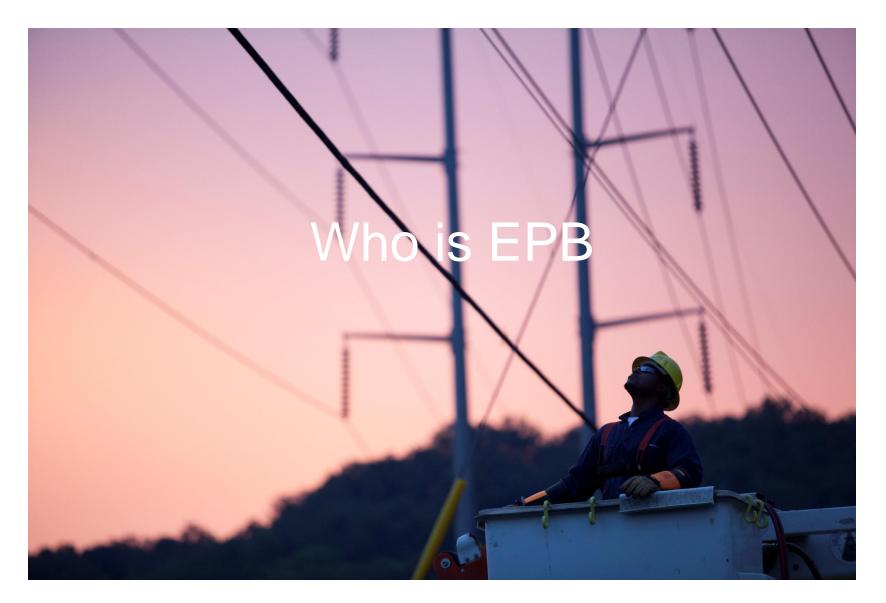
Colman Keane, CPA EPB

State of Tennessee, Fiscal Director 5 years CAFR, Statewide Indirect Cost Allocation Plan

Public Accounting/ Private Industry, CFO 9 years Merger/Acquisition, MAS, Business Start Ups, Financing

EPB (Electric Power Board of Chattanooga) 10 years Financial Reporting, Budget, IT, FTTH Business Plan, Project Mgt – FTTH Electrics







1876 "The telephone has too many shortcomings...the device is inherently of no value to us."

Western Union



1897 "Radio has no future."

Lord Kelvin, President, Royal Society



1899 "Everything that can be invented has already been invented."

Director, U.S. Patent Office



1927 "Who the hell wants to hear actors talk?"

H.M. Warner, Warner Brothers



"I think there is a world market for maybe five computers."

Thomas Watson, Chairman IBM



1977

"There is no reason anyone would want a computer in their home."

Ken Olsen, Founder and Chairman DEC (Digital Equipment Corporation, now part of Compaq)



1981 "640K ought to be enough for anyone."

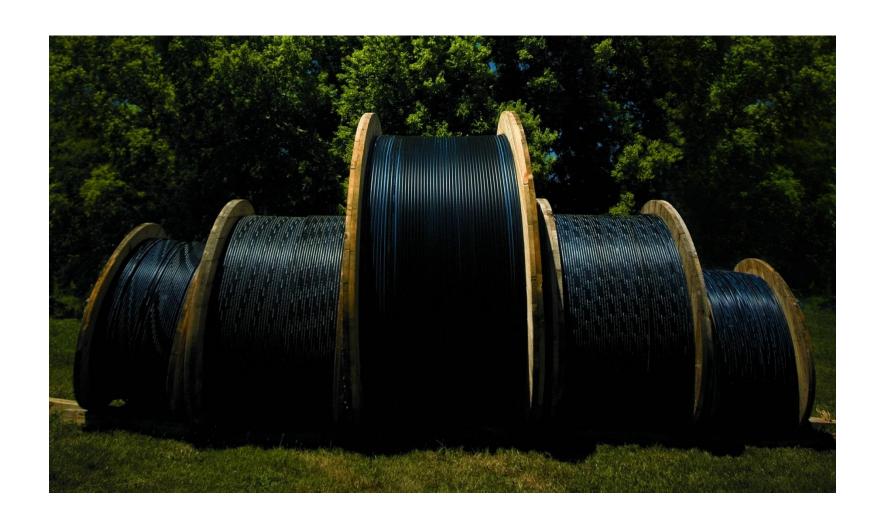
Bill Gates



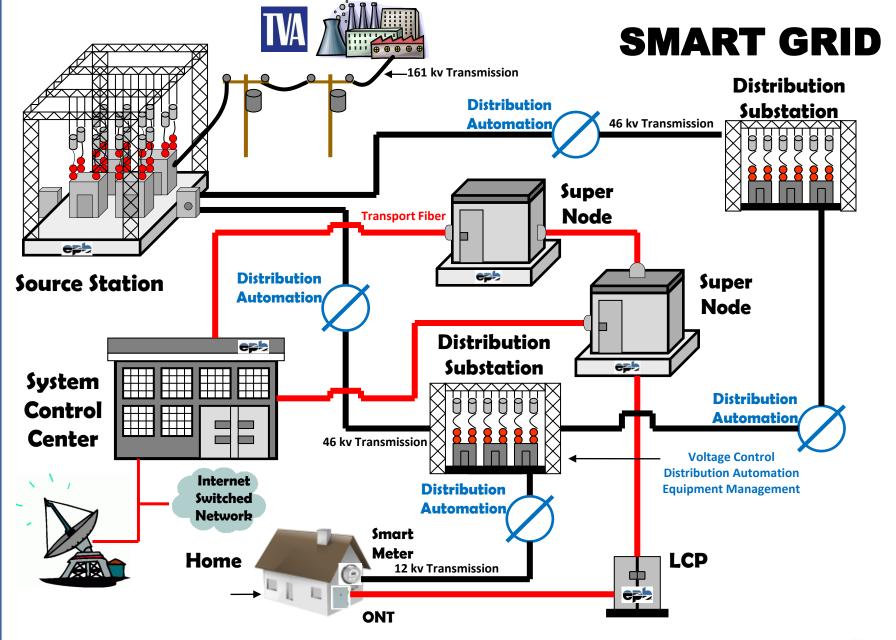
Name this country . . .

- Richest in the World
- Largest Military
- Center of world business and finance
- Strongest education system
- World center of innovation and invention
- Currency the world standard of value
- Highest standard of living











EPB Smart Grid

Improve Customer Communication

Reduce Costs / Improve Operations

Improve Reliability and Power Quality

Smart Meters

In-Home Electronics

Asset Management

Web Interface

Power Cost Management

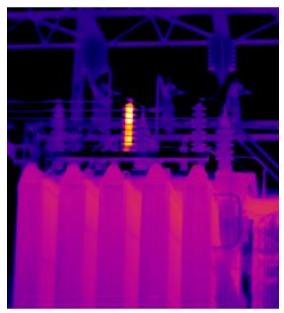
Distribution Automation

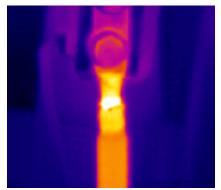
Security and Safety



Smart Grid Applications









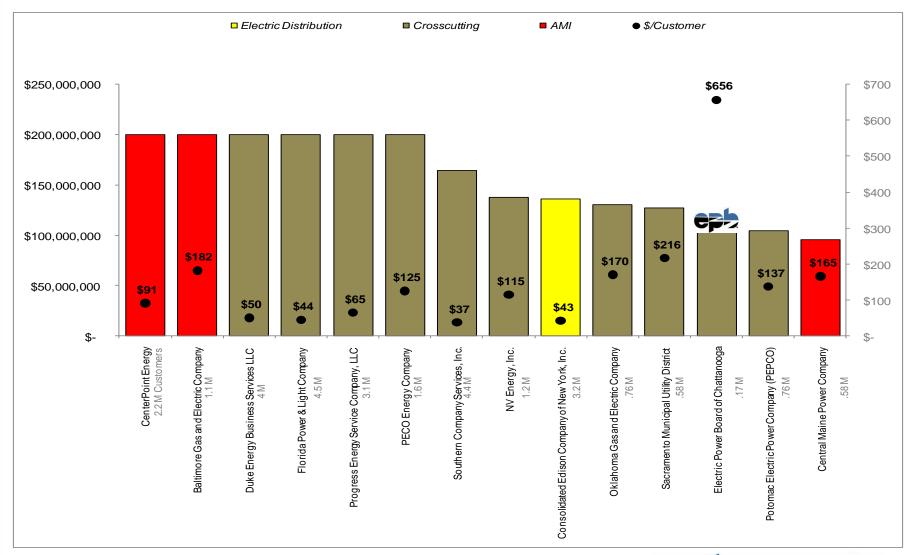


Smart Grid Grant

\$111,567,606 for EPB Electric Power Customers



ARRA SGIG AWARDS \$ PER TOTAL CUSTOMERS IN SERVICE TERRITORY





Grant Projects

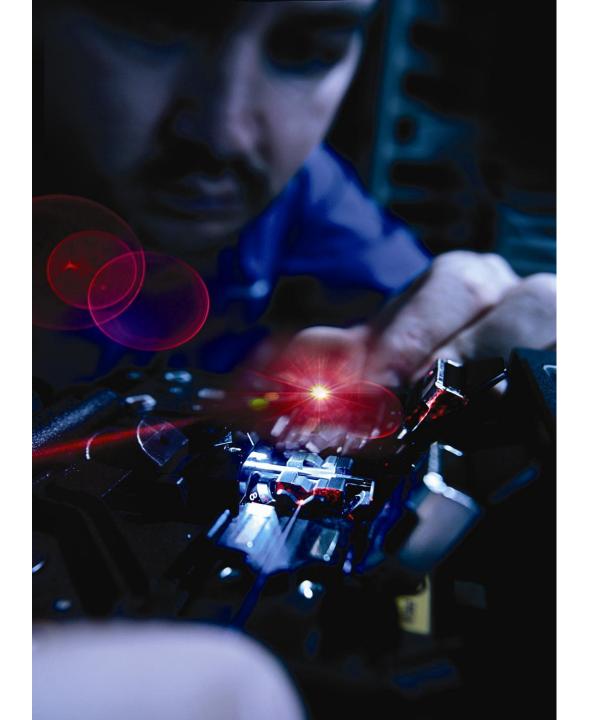
| • | Fiber Build | \$34,440,000 |
|---|-------------|---------------|
| | | 7 - 7 - 7 - 7 |

| • | Network | Electronics | \$3 | 31 | ,600 | ,000 |
|---|---------|-------------|-----|----|------|------|
|---|---------|-------------|-----|----|------|------|

- Meter Data Mgmt System \$1,080,000
- In-Home Electronics \$750,000
- Web Interface \$190,000

Partners Committing Additional \$4 million











Customers Selecting...EPB Fiber Optics























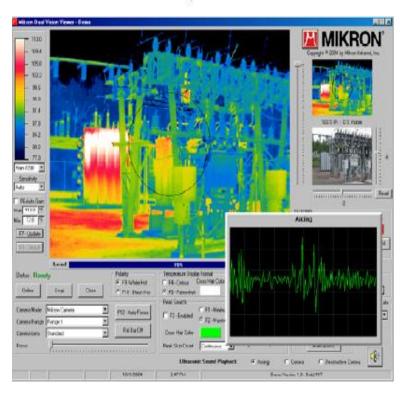






Value to Electric Customers





\$300 M electric system value over 10 years

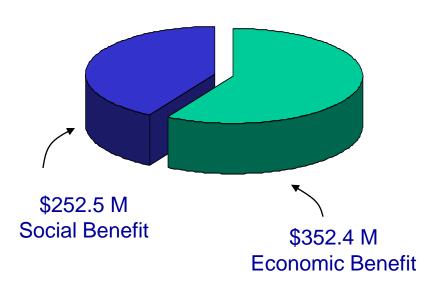
- Power Quality & Reliability
 - Reduction in theft
- Operational and Capital Savings
 - Customer Benefit
- EPRI Validated of EPB Study states:

"EPB is to be commended for making a key strategic decision for implementation and use of a fiber optic network. It is difficult to imagine any competing move offering such significant potential for expanding customer services."



Economic Development & Quality of Life

Benefits of Fiber-to-the-Home Deployment in Hamilton County



IMPLAN Model Forecast 10 Year Value:

\$604.9 M PV Return @ 10%

2,638 New Jobs Forecast

"Second generation broadband must come to communities like Hamilton County if the U.S. is to remain competitive globally. Communities would do well to give serious thought to adapting this technology sooner rather than later."



Attract New Business

Top 10 Site Selection Factors 2005

| 1. Availability of Telecommunications Service | | |
|---|--|--|
| 2. State & Local Incentives | | |
| 3. Highway Accessibility | | |
| 4. Labor Cost | | |
| 4. Proximity to Major Markets | | |
| 4. Availability of High Speed Internet | | |
| 5. Availability of Skilled Workforce | | |
| 6. Availability of Land | | |
| 7. Tax Exemptions | | |
| 8. Corporate Tax Rate | | |
| 9. Occupancy or Construction Cost | | |
| 10. Energy Availability and Cost | | |

| 96 |
|------|
| 95.9 |
| 94 |
| 93.8 |
| 93.8 |
| 93.8 |
| 89.6 |
| 89.1 |
| 86 |
| 85.7 |
| 84.3 |
| 83.7 |

Study: <u>Understanding the Benefits of Municipal Broadband in Tennessee</u>
MIT Professor William Lehr Ph.D.
and Sharon Gillett, Feb 2006.

Broadband networks will create 1.2 M new jobs in the United States.

Benefits of broadband in Tennessee Suggest \$10 billion in additional GDP and 20,000 new jobs.

Source: APPA Economic Development Conference July 2006 Halcyon Business Publications, Inc.



Regulatory Landscape

Local Franchise Authority

- Rates for Basic Tier
- Handles customer complaints
- Public Right of Ways

FCC

- Franchise standards
- Signal carriage
- Program nonduplication/exclusivity
- Nonbroadcast or cablecasting services
- Cross-ownership
- Equal employment opportunity
- Technical standards.



